

# SIX-YEAR SURVEILLANCE OF DIPHTHERIA OUTBREAK IN INDONESIA

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## BACKGROUND

- Diphtheria is a very dangerous disease causing numerous problems in some countries in the world, including Indonesia
- Many developed countries do not have many cases of diphtheria anymore
- Indonesia is one of the large country in tropical area. There are 17 thousands islands and 240 millions people.
- There has been a diphtheria outbreak since 2011 in East Java Province (population 35 millions)

## OBJECTIVES

To analyze the six-year surveillance report of diphtheria outbreak in East Java Indonesia (2011-2016)

## MATERIALS AND METHODS

- Surveillance data, actively and passively collected
- From 38 districts
- January 2011 – December 2016
- Microbiology culture at Balai Besar Laboratorium Kesehatan Surabaya

## RESULTS

- 3353 clinical cases , peak at 2012 (955 patients) ; Male 53.4%
- CFR 3.3% (110 patients)
- Most patients were < 15 year-old (69.4%) ; youngest 11 month. Oldest 70 years.
- Increasing proportion of adult
- Complete immunization by age only 11.7% → cold chain management ?
- Political turmoil since 1998
- Only 197 positive microbiology cultures of toxigenic *C. diphtheriae* ; mostly mitis
- The outbreak continues

## CONCLUSION

For six years (2011-2016) there have been a diphtheria outbreak in East Java Indonesia. The highest number of patient was recorded in 2012. Most of the patients affected were not completely immunized. Each year, the positivity rate of throat and nasal swab culture were low. Until today, many efforts in severely affected area could not stop the high incidence of diphtheria cases.